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## **REMARKS**

Reconsideration of the second Office action issued in connection with the above-identified patent application is requested in view of the foregoing amendments and the following remarks. Prior to entry of the above amendments, all pending claims were rejected as being anticipated by or obvious over U.S. Patent No. 4,378,855 to Haub. By the above amendments, claims 6, and 40-50 are cancelled without prejudice, claims 1, 7-9, 13, 51, and 54 are amended, and new claims 63-74 are added.

As an initial matter, claim 13 has been amended to correct a typographical error, namely an omitted word, that was not included in the originally presented claim.

Claims 1, 6-18, 22-27, 29-43, 46-48, and 51-59 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,378,855 to Haub, and claims 19-21, 43-45, 49-50 and 60-62 stand rejected under 35 U.S.C. § 103 as being obvious over Haub. Although many of these claims were previously indicated to be allowable in the first Office action, the claims have now been rejected over Haub. Applicants have studied the cited reference and the reasons expressed in the Office action in view of the pending claims, and Applicants respectfully request reconsideration and withdrawal of the rejections for at least the reasons expressed below.

As set forth in the Office action, Haub is cited for disclosing a multi-speed battery operated vehicle having a speed controller with switches MS1-4 for controlling the rate at which a user-selected speed is transmitted to the driven wheels of the vehicle. Applicants agree with the Examiner that Haub discloses an electric vehicle, albeit an industrial floor cleaner instead of a children's ride-on vehicle. Applicants further agree with the Examiner that Haub discloses a vehicle that is selectively driven at a variety of

speeds, such as are selected through a variety of switches. However, and as discussed in more detail below, Applicants cannot agree that Haub discloses a vehicle with an electronic speed controller that regulates the rate at which a user-selected rotational input is transmitted to the vehicle's driven wheel(s).

Haub discloses a vehicle with a series of manual switches that are selectively actuated by the user to select a speed and/or direction of movement of the vehicle, which is referred to herein as a user-selected rotational input. The specification of Haub is clear that the cited switches, MS1-4, as well as the other disclosed switches, MS5-10, are all manual switches that are positively actuated by a user, such as by pressing a button or depressing a pedal that contacts the switch. In fact, the "MS" in designators MS1-10 clearly stands for "manual switch." For example, column 2, lines 34-66, describe switches MS1-4 as appearing in the vehicle in a foot pedal, and expressly refer to MS3-4 as being manual switches. For the purpose of completeness, column 3 of Haub reinforces the fact that the switches of Haub are manual switches, with MS5 being described as a key-operated switch, MS6 being attached to the vehicle's parking brake. MS7 being a seat that is actuated by a user sitting on the vehicle's seat, and MS8 being a push-button switch. The manually controlled operation of the vehicle using MS1-4 is perhaps most clearly described in column 7, line 37, to column 11, line 12. description explicitly discusses how a user must manually actuate each of the switches to control the speed at which the vehicle is driven, the direction at which the vehicle is driven, etc.

Perhaps more importantly, Haub does not include an electronic or other speed controller that selectively regulates the rate at which the user-selected rotational

input is transmitted to the driven wheel(s) of the vehicle. Instead, the vehicle of Haub appears to be designed to transmit the entire selected rotational input to the driven wheel(s) upon the user depressing the appropriate one or ones of the vehicle's manual switches. Therefore, Haub permits a user to select, via a series of manual switches, the magnitude of the rotational input and when the rotational input is manually selected. However, once the rotational input is selected and transmission of the rotational input begins, the entire selected rotational input appears to be transmitted as a unit to the driven wheel(s). Therefore, while Haub provides a vehicle with a switch assembly that provides a user with many different speed configurations, Haub does not regulate the rate at which the selected rotational input is transmitted to the vehicle's driven wheel(s).

In contrast to such a vehicle, claim 1 is specifically directed not only to a children's ride-on vehicle, but also to such a vehicle that includes an electronic speed controller that regulates the rate at which the selected rotational input is transmitted to the driven wheel assembly of the vehicle. As discussed above, Haub fails to disclose or suggest such an electronic speed controller. However, claim 1 has been amended to more clearly recite that the electronic speed controller of claim 1 regulates the delivery of the rotational input after selection of the rotational input by a user. Amended claim 1 is reproduced below for the Examiner's convenience.

- 1. A children's ride-on vehicle, comprising:
- a body having a seat adapted to receive a child;
- a plurality of wheels rotatably coupled to the body, wherein the plurality of wheels includes a driven wheel assembly and a steerable wheel assembly;
- a steering assembly having a steering mechanism positioned for actuation by a child sitting on the seat and operatively connected to the steerable wheel assembly to transmit user-selected steering inputs to the steerable wheel assembly; and
  - a drive assembly, comprising:

a battery-powered motor assembly adapted to drive the rotation of the driven wheel assembly to propel the vehicle along a riding surface;

at least one user input device that is positioned for actuation by a child sitting on the seat and adapted to receive a user input selecting a selected rotational input; and

an electronic speed controller adapted to regulate, after receipt of the user input, the rate at which the selected rotational input is transmitted to the driven wheel assembly according to a predetermined transmission profile in which the selected rotational input is incrementally transmitted to the driven wheel assembly.

Although not believed to be necessary to distinguish Haub or the other references of record, claim 1 also has been amended to recite that the electronic speed controller regulates the rate at which the selected rotational input is transmitted to the driven wheel assembly according to a predetermined transmission profile in which the selected rotational input is incrementally transmitted to the driven wheel assembly. In other words, just in case the automatic, essentially immediate, delivery of the entire selected rotational input is construed to be controlling the rate of delivery of the selected rotational input, amended claim 1 clarifies that the rate of delivery is electronically controlled to be less than this complete delivery of the rotational unit all at once. As discussed in the specification of the present application, when utilized, the electronic speed controller is adapted to selectively control the rate at which the selected rotational input is delivered to prevent the entire rotational input to be delivered at once, thereby resulting in complete delivery of the selected rotational input taking longer than in a vehicle in which this rate is not controlled. Since Haub discloses only the uncontrolled transmission of the rotational input after selection thereof by a user, it follows that Haub neither discloses nor suggests the electronic speed controller recited in amended claim 1.

For at least the above reasons, Applicants request that the rejection of claim 1 be reconsidered and withdrawn. For the purpose of completeness, Applicants

further submit that the rejection of the pending claims over Haub should be withdrawn because Haub is non-analogous art to the present application. As discussed, Haub is directed to large, industrial floor cleaning equipment, whereas the presently pending claims are directed to children's ride-on vehicles, which as discussed, are sized for operation by a child. However, the substantial difference between the electronic control system recited in claim 1 and the manual switches of Haub is believed to render moot the need to further expound upon the differences between these vehicles in this response. Applicants believe the Examiner will understand their need to make a record of this distinction, even though the above-discussed differences should be sufficient to withdraw the rejections. Should the Examiner disagree, she is encouraged to contact Applicants' undersigned attorney.

Claims 7-27 and 29-39 depend directly or indirectly from amended claim 1 and therefore should be allowed when amended claim 1 is allowed. For the purpose of brevity, and in view of the above discussion of how amended claim 1 patentably distinguishes Haub, each of these dependent claims is not discussed in detail in this response and each additional reason why these dependent claims patentably distinguish the references of record is not presented. However, Applicants want to briefly discuss a few of these dependent claims and to present illustrative additional reasons why these claims should be allowable over the references of record.

Claims 7-9 depend from claim 1 and respectively recite that the predetermined transmission profile includes linear, step-wise, and non-linear increases in the percentage of the selected rotational input that is transmitted to the driven wheel assembly. Therefore, in addition to simply reciting that the children's vehicle

electronically controls the rate at which a user-, or perhaps more accurately, child-selected rotational input is incrementally transmitted to the vehicle's driven wheel assembly, claims 7-9 recite that the predetermined transmission profile includes at least one of a linear, non-linear, or step-wise increase in the transmitted percentage of the selected rotational input. As discussed, Haub and the other cited references fail to disclose or suggest any electronic speed controller (for children's ride-on or other vehicles) that selectively controls, through incremental delivery, the rate at which the selected rotational input is transmitted to the vehicle's driven wheel assembly. Accordingly, it follows that Haub does not disclose or suggest an electronic speed controller that selectively controls the rate at which the user-selected rotational input is transmitted via a predetermined transmission profile that includes linear, non-linear, or step-wise increases in the percentage of the selected rotational input that is transmitted to the driven wheel assembly. For at least this additional reason, claims 7-9 recite subject matter that is neither disclosed nor suggested in Haub.

Claim 10 depends from claim 1 and recites that the electronic speed controller regulates the rate of transmission of a first percentage of the selected rotational input, with the first percentage being less than 100% of the selected rotational input. Claim 13 depends from claim 10 and further recites that after transmission of the first percentage of the selected rotational input, the electronic speed controller is further adapted to maintain the transmission of the first percentage and thereafter regulate the transmission of a second percentage of the selected rotational input. Claims 14-18 depend from claim 13 and further recite that the second percentage is incrementally

transmitted and transmitted according to a predetermined transmission profile, such as the above-discussed linear, non-linear and step-wise profiles.

At best, Haub discloses a vehicle with a wiring assembly that includes a plurality of manual switches. However, Haub fails to provide any teaching or suggestion regarding regulating the rate at which the user-selected rotational input is transmitted, much less a controller that initially transmits only a subset of the user-selected rotational input. Haub may permit the user to select the magnitude of the rotational input, and potentially to delay when the selected rotational input begins to be transmitted. However, Haub discloses only that the entire selected rotational input is transmitted once the transmission begins. Therefore, Haub fails to disclose or suggest selectively transmitting only a portion of the user-selected rotational input, much less to do so with a predetermined transmission profile (claim 1), to thereafter transmit a second percentage of the selected rotational input (claim 13), etc. Moreover, since Haub does not disclose or suggest incrementally controlling the rate at which the selected rotational input is transmitted, it follows that Haub does not disclose utilizing predetermined transmission profiles for the transmission of the first, second or other percentage of the selected rotational input, much less profiles that include linear, non-linear or step-wise increases. For at least the above reasons, Applicants request that the rejections of claims 10-18 be withdrawn.

Claim 20 depends from claim 1 and recites that the electronic speed controller includes a microprocessor and is adapted to regulate the actuations of the ride-on's motor assembly through microprocessor-based duty cycle ramping. Similarly, claim 21 recites that the electronic speed controller is adapted to regulate the actuations of the

ride-on's motor assembly through pulse width modulation of the actuation of the motor assembly. Although the Examiner correctly recognizes that claims 20 and 21 recite structure that is not disclosed in Haub, claims 20 and 21 stand rejected as being obvious over Haub. As expressed in the Office action, it would be obvious to replace manual mechanisms with automatic mechanisms.

Applicants respectfully traverse the rejections of claims 20 and 21 and request reconsideration thereof. Without debating the obviousness, or not, of replacing manual mechanisms with automatic mechanisms, Applicants believe that there is a more fundamental distinction between the disclosure of Haub and the subject matter recited in claims 20 and 21. As discussed, Haub provides a user with a wide range of manual switches to control the operation of the industrial floor cleaner, such as for when lower speeds are needed "to concentrate on a particularly dirty area," (column 7, lines 35-36) or when the operator requires "more power or speed" (column 8, lines 33-34). As such, the manual switches are provided and necessary to Haub because an automatic transmission would not provide the user with the required flexibility to select the power and/or speed necessary for a particular cleaning operation. Perhaps more importantly, even if replacing the manual switches of Haub with an automatic transmission would not destroy the utility of Haub, it still would not provide the electronic speed control (much less a children's vehicle that includes the same), as recited in claims 20 or 21. The reason for this is that the pending claims are all directed to selectively controlling the rate at which a user-selected rotational input is transmitted, after selection by the user, to the driven wheel(s) of the vehicle. In contrast, Haub is completely silent as to the transmission of the selected rotational input, with Haub instead focusing entirely upon the range of

Page 22 - AMENDMENT AND REQUEST FOR RECONSIDERATION; Serial No. 10/081,934

speeds and operating configurations that a user can select. As such, Applicants request that the rejection of claims 20 and 21 be reconsidered and withdrawn.

Claims 22 and 23 depend from claim 1 and respectively recite that the children's ride-on vehicle has a body that is a reduced-scale version of an adult-sized vehicle and that the body is at least substantially formed from molded plastic. As discussed, Haub discloses an industrial floor cleaner. It follows then that Haub cannot anticipate claims 22 and 23, regardless of the control mechanisms disclosed in Haub. Furthermore, Applicants submit that it would not be obvious to embody the industrial floor cleaning structure of Haub into a children's vehicle having a reduced-scale and/or at least substantially plastic body. Haub not only provides no teaching or motivation to make this modification, but also by its basic nature and status as non-analogous art, implicitly teaches away from such a modification. For at least these additional reasons, Applicants submit that the rejections of claims 22 and 23 should be withdrawn.

Claims 33 and 36 respectively depend from claim 1 and recite that the electronic speed controller is further adapted to regulate the transmission of the selected rotational input responsive at least in part to one or more selected or actual characteristics of the drive assembly, with the selected characteristic being selected during operation of the ride-on by a child sitting on the seat and the actual characteristic being determined during operation of the ride-on. Applicants have studied the reference to Haub and submit that Haub fails to disclose any selective regulation of the transmission of the user-selected rate of rotation based at least in part upon one or more selected or actual characteristics of the drive assembly, much less such regulation in a children's ride-on vehicle having the electronic speed controller recited in claim 1. As such, Applicants

submit that claims 33 and 36 disclose subject matter that is neither disclosed nor suggested in Haub. Claims 34-35 and 37-39 depend from claims 33 and 36 and therefore should be allowed when claims 33 and 36 are allowed.

Currently amended independent claim 51 is generally directed to a children's ride-on vehicle with an electronic speed controller that regulates the rate at which a user-selected rotational input is transmitted to the vehicle's driven wheel assembly, with the speed controller selectively regulating the transmission of a first percentage, or subset, of the selected rotational input, and thereafter transmitting at least a second percentage of the selected rotational input. Amended claim 51 is reproduced below for the Examiner's convenience.

- 51. A children's ride-on vehicle, comprising:
- a body having a seat adapted to receive a child;
- a plurality of wheels rotatably coupled to the body, wherein the plurality of wheels includes a driven wheel assembly and a steerable wheel assembly;
- a steering assembly having a steering mechanism positioned for actuation by a child sitting on the seat and operatively connected to the steerable wheel assembly to transmit user-selected steering inputs to the steerable wheel assembly; and
  - a drive assembly, comprising:
- a battery-powered motor assembly adapted to drive the rotation of the driven wheel assembly to propel the vehicle along a riding surface;
- at least one user input device that is positioned for actuation by a child sitting on the seat and adapted to receive a user input selecting a selected rotational input; and

an electronic speed controller adapted to regulate at least one of the timing and the rate at which the selected rotational input is transmitted to the driven wheel assembly, wherein the electronic speed controller is adapted to regulate the transmission of a first percentage of the selected rotational input to the driven wheel assembly upon receipt of the user input selecting the selected rotational input, and further wherein the first percentage is less than 100% of the selected rotational input, and further wherein upon transmission of the first percentage of the selected rotational input, at least a second percentage of the selected rotational input is transmitted to the driven wheel assembly.

Applicants submit that such an electronic speed controller, much less such a controller embodied in a children's ride-on vehicle, is neither disclosed nor suggested in Haub. Although claim 51 and previously discussed claims 10 and 13 have somewhat different scopes, Applicants submit that the above-presented discussion is analogous to claim 51 and provides additional reasons why an at least two-part transmission of a user-selected rotational input is neither disclosed nor suggested in Haub.

Claims 52-62 depend directly or indirectly from claim 51 and therefore should be allowed when amended claim 51 is allowed.

New claims 63 and 69 generally correspond to original claims 22 and 23 rewritten in independent form. As such, the claims are directed to children's ride-on vehicles with electronic speed controllers that selectively control the rate at which the user-selected rotational input is transmitted to the vehicle's driven wheel assembly by microprocessor-based duty cycle ramping or pulse width modulation. Applicants submit that the subject matter of claims 63 and 69 is neither disclosed nor suggested in Haub, such as discussed above in connection with claims 22 and 23. As such, Applicants submit that new claims 63 and 69 patentably distinguish Haub and the other references of record. Claims 64-68 and 70-74 depend from claims 63 and 69 and therefore should be allowed when claims 63 and 69 are allowed.

With the entry of the above amendments, and for the reasons stated, Applicants submit that all of the issues raised in the second Office action have been addressed. If the Examiner has any questions or if there are any remaining issues, Applicants' undersigned attorney may be reached at the number listed below. Similarly, if the Examiner believes that a telephone interview would be helpful to advance

prosecution of the application, the Examiner is invited to contact Applicants' undersigned attorney at the number listed below.

Respectfully submitted,

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